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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,728

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Dimitri A. Chernyak

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09/18/2009

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EXAMINER

SHAY, DAVID M

ART UNIT

PAPER NUMBER

3769

MAIL DATE

DELIVERY MODE

09/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,728	Applicant(s) CHERNYAK ET AL.	
	Examiner david shay	Art Unit 3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 10, 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

In view of the Brief on Appeal filed on April 10, 2009, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

The drawings are objected to because the elements in Figure 3 should be labeled with indicia indicative of their function. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by

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the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “known object”; the “imaging mark on the calibration surface”; the “calibration surface”; “photosensitive material”; “silkscreen material”; “Zapit paper”; “luminescent material”; “photographic material”; the “image capture device”; the “microscope camera”; and the “chrome layer on a glass plate” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8 and 30 contain the trademark/trade name Zap-it®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not

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comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe laser calibration paper and, accordingly, the identification/description is indefinite.

Claims 1-14, 16-24, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kern in combination with Hoffer and L'Esperance, Jr. Kern teaches a calibration method for a laser surgery system wherein a calibration surface is imaged via an interferometer and then ablated, the ablation is measured and the laser is adjusted to correct whatever inaccuracies exist in the beam delivery, so the desired ablation profile is produced. Hoffer teaches using a microprocessor based system to calibrate a surgical laser using a masked sensor, which is considered an image capture device, to verify and provide information to correct laser parameters such as intensity and location. L'Esperance, Jr. teaches the details of an ophthalmological laser surgery system, including the use of an iris diaphragm for forming the beam, opening or closing the diaphragm progressively during the course of a surgery and the use of treatment beam diameters in the claimed range. It would have been obvious to the artisan of ordinary skill to employ an image of a separate object, rather than the image of the unablated calibration surface as the standard to which the ablated calibration surface is compared, since this is not critical, is well within the skill of one having ordinary skill in the art; and provides no unexpected result and to employ a monochrome substrate, be it chrome, Zap-it® paper, luminescent material, etc as these are recognized as useful for laser calibration (Zap-it® paper being specifically sold for this purpose) also produced no unexpected result and all are well within the scope of one having ordinary skill in the art; it is also noted that the use of these particular materials, with respect to the method amounts to the mere

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claiming of the use of a particular structure, which in no way manipulatively affects the methods, and this is given little patentable weight (Ex Parte Pfeiffer 782 OG 639, 1962 CD 408); similarly, the decision to position various uncoupled elements in a certain way, such as the known object and or calibration surface and the surgical system, with regard to the apparatus claims does not affect the structure of either device; to determine various non-idealities associated with the scanning system, such the inaccuracies associated with the beam positions, as taught by Hoffer, since these are necessary for the ablation to be performed properly, which is the goal of Kern, similarly detecting and compensation for wobble induced by beam rotators would also to be obvious in order to produce the desired ablation profile, it would further have been obvious to adjust e.g. beam size, position, etc., if this were not properly set, since such a fundamental inaccuracy in the beam would produce a drastically improper result, as the error would be reproduced with every shot and would produce an ablation profile far from that desired, as such this would constitute the solution of a well known problem, with a known solution having predictable results (KSR International Co. v Teleflex Inc. 82 USPQ2d 1385 (Supreme Court, 2007)), with thus producing a method and device such as a claimed.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kern in combination with Hoffer and L'Esperance, Jr, as applied to claims 1-14, 16-24, and 26-32, and further in view of Noh. Noh teaches the existence of hysteresis in iris opening size. It would have been obvious to the artisan of ordinary skill to account for various non-idealities associated with the iris diaphragm, such as hysteresis, as taught by Noh, since iris hysteresis in a corneal laser surgical system, would produce a fundamental inaccuracy in the beam which in turn would produce a drastically improper result, as the varying error would be manifested with every shot and would produce an ablation profile that differed from that desired in a complex and non-symmetrical way, as such this would constitute the solution of a well known problem, with a known solution having predictable results (KSR International Co. v Teleflex Inc. 82 USPQ2d 1385 (Supreme Court, 2007)), with thus producing a method such as a claimed.

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Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kern in combination with Hoffer and L'Esperance, Jr, as applied to claims 1-14, 16-24, and 26-32, and further in view of Telafair et al. Telafair et al teach a laser surgical system including a microscope and camera, and further noting that at least the centration of the beam with respect to the microscope has been previously calibrated (see column 7, lines 36-51). It would have been obvious to the artisan of ordinary skill to employ the surgical microscope and camera to provide an image of the calibration objects, since this would provide high magnification, and a greater image resolution than using the naked eye, thereby permitting greater accuracy in calibration of the device, and would allow a record to be made of the images, thereby enabling the calibration to be checked afterwards in case questions as to the accuracy of the calibration arose later, with thus producing a device such as a claimed.

Response to Arguments

Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry M. Johnson, III, can be reached on (571) 272-4768 on Monday, Tuesday, Wednesday, Thursday, and Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/david shay/
Primary Examiner, Art Unit 3769

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Henry M. Johnson, III/

Supervisory Patent Examiner, Art Unit 3769.